

Date: Tuesday, 6/19/2007 4:39:56 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 33012
 Estimate Number : 12902
 P.O. Number :
 This Issue : 6/19/2007 S.O. No. :
 Prsht Rev. : NC
 First Issue : 1 / Type : SMALL /MED FAB
 Previous Run :
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A New Issue 07.06.12 EC

Drawing Name : WEARPLATE
 Part Number : D350813
 Drawing Number : D3508 U/R
 Project Number : N/A
 Drawing Revision : U/R
 Material :
 Due Date : 6/25/2007

PROTOTYPE
 PLEASE RETURN ALL ISSUED
 DATA TO ENGINEERING
 PH 07-06-20

Qty: 2 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M304S20GA 304/316 .040 Sheet



Comment: Qty.: 0.1806 sf(s)/Unit Total : 0.3612 sf(s)
 304 SS .038" THK
 (M304S20GA)
 Batch: M104646

**CERTIFICATE OF CONFORMITY
 REQUIRED**

SAN 07/06/20

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET
 1-Cut as per Dwg D3508
 Dwg Rev: U/R
 Prog Rev: U/R
 2-Deburr if necessary

SAN 07/06/20

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SAN 07/06/20

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

OK PH 07.06.21

5.0 BRAKE NC NC BRAKE



Comment: NC BRAKE
 1-Form on brake using DT8326 and DT8261 as per Dwg D3508

SB 07/06/21

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: 22 Date: 09/07/09
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/06/20	2.0	One part Scrap, Used wrong Dxf "D3508-13Fjig instead of using D3508-13"	<i>[Signature]</i>	Scrap destroy replace use the right DXF <u>MAFF</u>	SAD 07/06/20	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

NOTE: Date & initial all entries

Date: Tuesday, 6/19/2007 4:39:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 33012

Part Number: D350813

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

E 07-06-21

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

m 10/601

BR/M.A 07-06-21 (2)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

E 07-06-21

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

FOR ENGINEERING USE ONLY

E 07-06-22

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/07/09

Job Completion



U 07-07-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

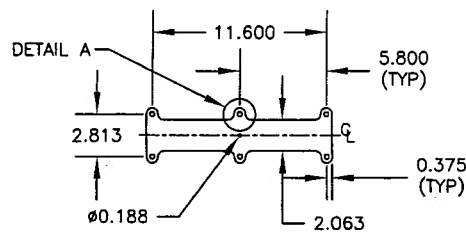
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

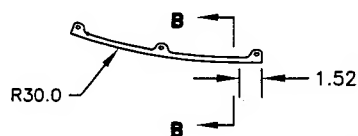
NOTE: Date & initial all entries

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING

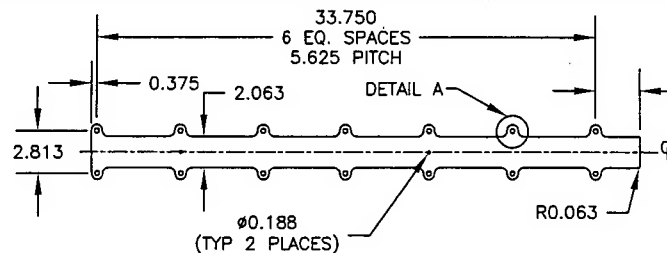
PH 07.06.20



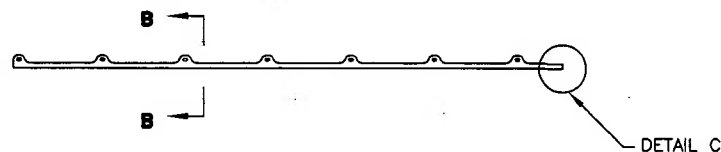
D3508-1 FLAT PATTERN



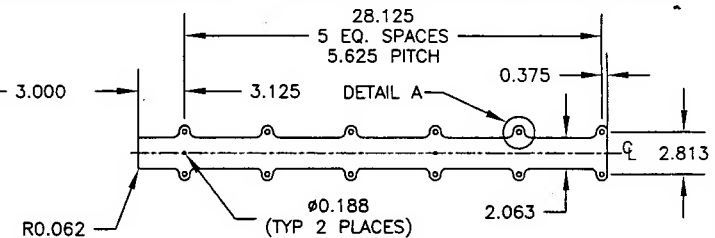
D3508-1 BENDING DETAIL
(MAKE FROM D3508-1F)



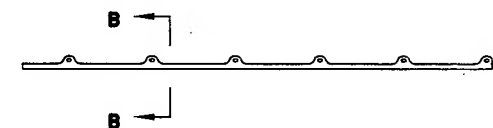
D3508-3 FLAT PATTERN



D3508-3 BENDING DETAIL
(MAKE FROM D3508-3F)

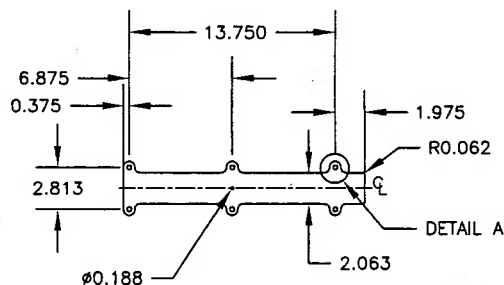


D3508-5 FLAT PATTERN

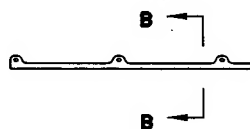


D3508-5 BENDING DETAIL
(MAKE FROM D3508-5F)

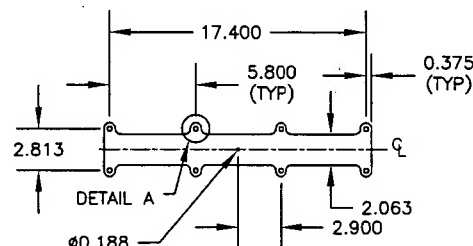
UNDER REVIEW
PH 07.06.20



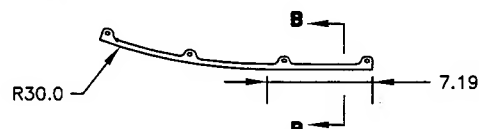
D3576-7F FLAT PATTERN



D3576-7 BENDING DETAIL
(MAKE FROM D3576-7F)



D3508-9F FLAT PATTERN



D3508-9 BENDING DETAIL
(MAKE FROM D3508-9F)

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART MATERIAL SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) PART IS SYMMETRICAL ABOUT CENTERLINE

C	07.04.20	ADD -9/-11/-13, MOVE TAB OUTBOARD
B	06.10.27	CHANGE STAINLESS STEEL, WIDEN TAB
A	06.04.21	NEW ISSUE
DESIGN	PH	DRAWN BY PH
CHECKED	PH	APPROVED PH
DATE	07.04.20	TITLE WEARPLATE
DRAWING NO.	D3508	REV. C
SHEET 1 OF 2		SCALE 1:8

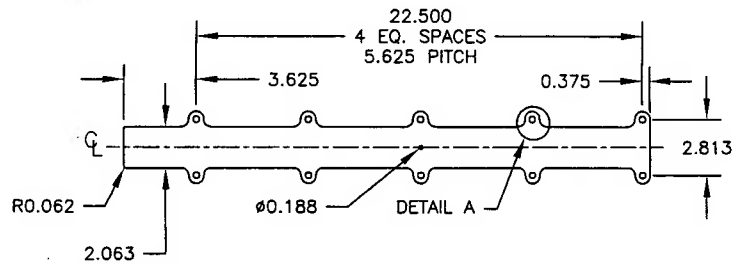
COPYRIGHT © 2008 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DART DART AEROSPACE USA, INC.
PORT HADLOCK, WA

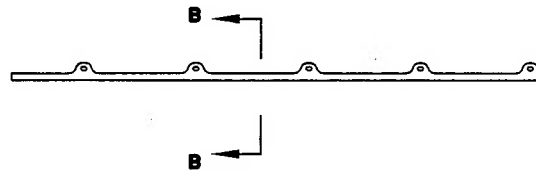
NO. 33012
WORK ORDER
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
SHOP COPY
RETURN TO
ENGINEERING

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING

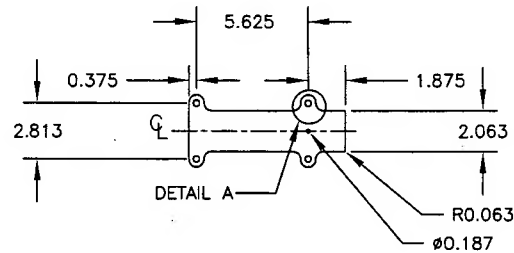
PH 07.06.20



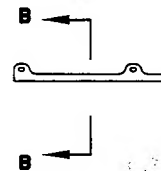
D3508-11F FLAT PATTERN



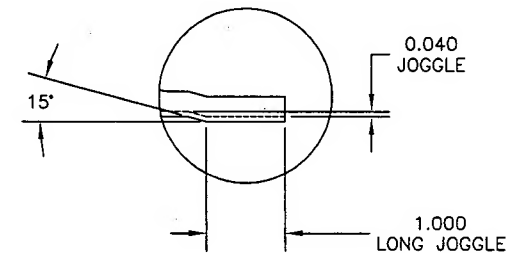
D3508-11 BENDING DETAIL
(MAKE FROM D3576-11F)



D3508-13F FLAT PATTERN



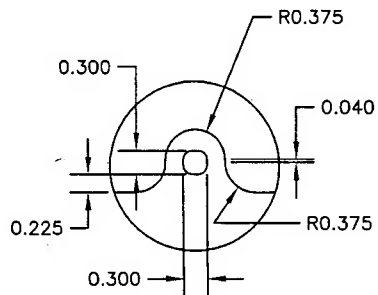
D3508-13 BENDING DETAIL
(MAKE FROM D3508-13F)



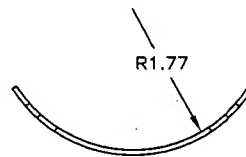
DETAIL C
(SCALE 1:2)

UNDER REVIEW

PH 07.06.20



DETAIL A
(SCALE 2:3)



SECTION B-B
(SCALE 2:3)

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF DART MATERIAL SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDEX (REF 4.3.5.6)
PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) PART IS SYMMETRICAL ABOUT CENTERLINE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 33012

COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.		DESIGN <i>Ref</i>	DRAWN BY <i>Ref</i>	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED	APPROVED	DRAWING NO. D3508	REV. C SHEET 2 OF 2
		DATE 07.04.20	TITLE WEARPLATE SCALE 1:6		

DART AEROSPACE LTD		Work Order: 33012
Description: LUBRIC PLATE		Part Number: D350813
Inspection Dwg: D3508 Rev: V/R		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A 2.813	+/-0.010	2.810	✓		Vern	
B 6.375	+/-0.010	6.375	✓		Vern	
C 2.063	+/-0.010	2.070	✓		Vern	
D 5.625	+/-0.010	5.624	✓		Vern	
E 0.040	+/-0.010	0.036	✓		Vern	
F 1.875	+/-0.010	1.880	✓		Vern	
G Ø0.188	+0.005 -0.001	0.188	✓		Vern	
H 0.300	+/-0.010	0.302	✓		Vern	
I 0.300	+/-0.010	0.304	✓		Vern	
J						
K						
L						
M						
N						
O						
P						
Q						
R						
S						
T						
U						
V						
W						
X						
Y						

Measured by: SMD	Audited by: RH	Prototype Approval:	N/A
Date: 07/06/20	Date: 07.06.21	Date:	N/A

Rev	Date	Change	Revised by	Approved
		New Issue	KJ/RF	

Receiving Report

Date: 7/6/6

Batch No: M104640

Supplier: Magna

Dart P/O: 3842

Packing Slip:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Invoice:	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Receipt:	Cash	<input type="checkbox"/>	Cr	<input checked="" type="checkbox"/>

Release Note Attached: Yes ☒ No ☐ N/A ☐
Waybill Attached: Yes ☐ No ☒ ☐
Shipment Complete: Yes ☒ No ☒ N/A ☐
QC6 Inspection yes ☒ N/A ☐
Work Order 18010400 N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

Production/Admin:

Case

Received/Costing

initial

07/06/06
RLP 4784
G2

Location _____

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

[illegible]

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ DÙ.
 LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
 AYANT PRIS NAISSANCE DANS LE DISTRICT JUDICIAIRE DE MONTRÉAL.
 ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
 THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUÉBEC LEGISLATION AND SHOULD
 BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTREAL.

TOTAL ➡

643.00
38.58

681.58

ThyssenKrupp Acciai Speciali Terni S.p.A.
con Unico Socio

Una società della ThyssenKrupp Stainless
Viale D. Bria, 218 - 05100 Terni, Italia

14150006

**CERTIFICATO DI COLLAUDO
INSPECTION CERTIFICATE
CERTIFICATE DE RECEPTION
ABNAHMEPRÜFZEUGNIS 8***

EN 10204/3.1B

0521581

PAG

**SPECIFICA:
SPECIFICATION:
ANFORDERUNG:**

ASTM A 240/01A
ASME SA 240/01

ORDRE CLIENTE N°:
CUSTOMER ORDER N°:
COMMANDE DU CLIENT N°:
BESTELLUNG N°:

1137/SM457

CLIENTE: NEW YORK
CUSTOMER: NEW YORK
CLIENT: NEW YORK

USA

8E059217

INTERNAL ORDER NO
COMMANDE INT NT
WEBPAGE

AV. DI SPEDIZ. N°:
SHIPPING NOTICE N°: 00053137
AMS DESPATCH N°:
VERSANDANZEIGE N°:

**PRODUCTO:
PRODUCT
PRODOT
PRODUKT**

STAINLESS STEEL COILS



VERSANDZUBEHÖR N ^o														
N ^o PRODOTTO COL. N ^o N ^o BOONE DINING N ^o	N ^o COLATA N ^o N ^o N ^o COULEE SCHMELZE N ^o	COMPOSIZIONE CHIMICA - CHEMICAL COMPOSITION - COMPOSITION CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG												
		% C	% H	% N	% P	% S	% Cl	% K	% Na	% N	% Ti	% Cu	%	%
797629	0489673	.046	1.37	.34	.029	.001	18.31	8.02	.36	.050		.400		
797628	0489673	.046	1.37	.34	.029	.001	18.31	8.02	.36	.050		.400		

TYPE D'ACCIAIO:
STEEL TYPE:
TYPE D'ACIER:
MARQUE DE L'ACIER:

AST 304

~~304~~
304

TITOLO DEL PRODUTTORE:
PRODUCER TRADE MARK:
MARQUE DU PRODUCTEUR
ZEICHEN DES LIEFERMERS:

TIMBRO DEL RESPONSABILE INCARICATO
INSPECTOR STAMP
MARQUE DU RESPONSABLE CHARGE
STAMPFEL DES VERANTWORTLICHEN

This material does not contain Nickel of Cuban origin

80 CENTRO DI FINITURA P.F. TERNI

TRAIT. THERMO-ACROTIQUE D'ACROTIQUE 1050°C ARA-ACROTIQUE D'ACROTIQUE
HEAT TREATMENT - ANNEALING: AIR - WATER SPRAY - WATER COOLING
TRAITEMENT - THERMIQUE - HYPERTRAITÉ AIR - EAU ATOMISÉE - EAU
WÄRMEBEHANDLUNG - ABSCHÜSSEN: "LUFT - SPRÜHMISCHER - WASSER

PROCESSO DI F. LABORAZIONE E + ADD + CC
STEELMAKING PROCESS
PROCÉDE D'ELABORATION
ERSCHELMELZUNGSART

IL MATERIALE È RESISTENTE ALLA CORROSIONE INTERMETALLICA SECONDO
THE MATERIAL IS RESISTANT TO INTERMETALLIC CORROSION IN ACCORDANCE WITH
LE MATERIALE EST RESISTANT A LA CORROSION INTERMETALLIQUE SELON
RENCHE IN THE SCHWELZE IST BESTANDIG GEGEN INTERMETALLISCHE KORROSION GEMÄSS

ASTM A262

RISULTATI DELLE PROVE / TEST RESULTS / RESULTATS DES ESSAIS / ERGEBNIS DER PRÜFUNGEN (1 Nmm = 1 MPa)																		
N° COLLO PACKAGE N° N° COLIS KISTEN N°	N° ROTULO COL. N° N° BOBINE BAUCIN N°	DIMENSIONI DIMENSIONS ABMESSUNGEN INCHES	N° PESE POIDS N° PESAS GROSSES	PISTURA FRESH FRICTION ANFANGEN	PESE WEIGHT POIDS GEWICHT LBS	N° PROVA ES	ORIG FR	WAZIONE / TENSILE / TRACTION / ZUGBESUCH						SARREZZA HARDNESS DURETE HARTE	PIGGA BEND PLAGE KATWENGE ° = 180°	GRANO GRAB KORN (mm)		
								Kg		Kg		Kg					Kg	
								≥ 30	≥	> 75	≥ 40	≥	≥				≥ 92	≥
CARATTERISTICHE RICERCHATE - ASSURED CHARACTERISTICS - CHARAKTERISTIKES RECHES - ANFORDERUNGEN								→	→	→	→	→	→	→	→			
C06844	797629	0.86 X1219.2	1	2B	21671	T	T	41		96	58.0			82.0				
C06844						T	T	41		96	57.0			82.0				
C06973	797628	0.86 X1219.2	1	2B	21186	T	T	39		90	59.5			80.0				
C06973						C	F	39		90	58.3			80.0				

Conferiamo che i prodotti sopra elencati sono conformi alle prescrizioni dell'ordine.
We confirm products listed above comply with order requirements.
Nous confirmons que les produits ci-dessus énumérés sont conformes aux prescriptions de la commande.
Wir bestätigen, dass die Lieferung der Verbräuchergruppen der Bestellung entspricht.

COMPLIES WITH ED 2000/53

ThyssenKrupp Accei Special Terni S.p.A.
FIRMA DEL RESPONSABILE INCARICATO
INSPECTOR SIGNATURE
SIGNATURE DU RESPONSABLE CHARGÉ
UNTERSCHRIFT DER VERBODS OVERZICHT AGEN

Certificato

1) Sampling - Location - Ort
T = Tests - Top - Tide - Kept
C = Cods - Bottoms - Pies - Foss

2) Seiten-Direction-Föchtung
T = Transversale - Transverse - Transverse - Quer
L = Longitudinale - Longitudinal - Long - Längs

MARCA/TRADE:
MARCA/TRADE:
MARCA/TRADE:
MARCA/TRADE:

War. - Type
Hunt. or - Coll. N°
Thickness - Eject

TEPALL 30-05-2005

S. S. BAIANO